

CLAIMS

What is claimed is:

1. A clamping element comprising:

a first and a second leg having a first or second clamping jaw, respectively, for clamping a substrate, each of the two clamping jaws comprising a clamping plate deflectable in a predefined direction relative to the corresponding leg, and a sensor for measuring a deflection of the first clamping plate relative to the first leg, an output signal of the sensor containing an information whether the two clamping jaws are to remain closed or are to be opened.

2. The clamping element according to claim 1, wherein the first clamping plate is connected via two bridges to a first fixing plate secured to the first leg and wherein the second clamping plate is connected via two further bridges to a second fixing plate secured to the second leg.

3. The clamping element according to claim 2, wherein the sensor consists of strain gauges which are secured to the two bridges which connect the first clamping plate and the first fixing plate.

4. The clamping element according to claim 1, further comprising a bolt, the bolt secured to one of the two legs and bearing on the other of the two legs.

5. The clamping element according to claim 2, further comprising a bolt, the bolt secured to one of the two legs and bearing on the other of the two legs.

6. The clamping element according to claim 3, further comprising a bolt, the bolt secured to one of the two legs and bearing on the other of the two legs.
7. The clamping element according to claim 1, further comprising a rigid part limiting the maximum possible deflection of the clamping plate.
8. The clamping element according to claim 2, further comprising a rigid part limiting the maximum possible deflection of the clamping plate.
9. The clamping element according to claim 3, further comprising a rigid part limiting the maximum possible deflection of the clamping plate.
10. The clamping element according to claim 4, further comprising a rigid part limiting the maximum possible deflection of the clamping plate.
11. The clamping element according to claim 5, further comprising a rigid part limiting the maximum possible deflection of the clamping plate.
12. The clamping element according to claim 6, further comprising a rigid part limiting the maximum possible deflection of the clamping plate.